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drying said fermentation solids to produce a solid having a low moisture content; and
granulating said dry solid to produce granulated fermentation solids comprising granules
having a substantially uniform particle size.

REMARKS

Claims 1-10, 57-75, 77-85, 87, 99 and 100 are pending, the other claims being withdrawn from consideration due to a restriction requirement. Support for the amendment may be found throughout the specification and drawings as originally filed. Attached hereto is a marked up copy titled , "Version with Markings to Show Changes Made."

35 U.S.C. § 112

The Examiner now rejected Claims 1-10, 61, 66-75, 77-85, 87, 99 and 100 for failure to particularly point out and distinctly claim the subject matter. Specifically, the Examiner opposed the use of such terms as "substantially," "high resistance," "admixture," "blending," and "low." It is respectfully submitted that the terms are definite to a person of ordinary skill in the art. Additionally, some of the terms have been found definite by the Federal Circuit, such as the term substantially. *See In re Marosi*, 710 F.2d 799, 218 USPQ 289, 292 (Fed. Cir. 1983); *Eiselstein v. Frank*, 52 F.3d 1035, 34 USPQ 2d 1467 (Fed. Cir. 1995). Further, inventors may act as their own lexicographers. *Lear Siegler, Inc. v. Aeroquip Corp.*, 733 F.2d 881, 221 USPQ 1025, 1031 (Fed. Cir. 1984). Moreover, the Applicants respectfully submit that the use of "high resistance," "admixture," "blending," "potency stabilizer" and "edible feed" are sufficient to apprise one of ordinary skill of the art the intended meaning through their use in the specification. Claim 87 has been amended to more particularly describe the present invention.

35 U.S.C. § 102(e)

The Examiner rejected Claims 1-5, 7-9, 57, 60, 61, 63, 64, 66, 70, 71, 73, 77, 78, 80-82, 87, 99 and 100 under 35 U.S.C. § 102(e) as being anticipated by Kemp, U.S. Pat. No. 5,908,634. The Applicants respectfully disagree.

Anticipation requires that “the reference must teach every aspect of the claimed invention either explicitly or impliedly.” *MPEP* §706.02(a) (emphasis added). Further, “anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim.” *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1982) (citing *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 220 USPQ 193 (Fed. Cir. 1984) (emphasis added).

The Examiner has again failed to make a *prima facie* showing of anticipation. For instance, in Claims 66 and 77, and Claims 1 and 57 as amended, a fermentation solid is described which results from a reduction of a fermentation broth having a fermentation medium and an organism for producing an antibiotic. Thus, a fermentation solid may include amounts of the fermentation medium, fermentation broth, organism, and the like, when reduced, as well as the antibiotic.

Therefore, it is respectfully submitted that a *prima facie* case of anticipation has not been shown by the Examiner, and withdrawal of the rejection is respectfully requested.

35 U.S.C. § 102(b)

The Examiner rejected Claims 1-9, 57-64, 66-74, 77-84, 87, 99 and 100 under 35 U.S.C. § 102(b) as being anticipated by Klothen, U.S. Pat. No. 4,447,421. The Applicants respectfully disagree.

As claimed in Claims 1, 57, 66, 77 and 87, an animal feed premix and supplement

is produced from a broth by reducing a fermentation broth to obtain a fermentation solid. However, in the Klothen reference, a process is disclosed wherein a particulated animal feed is formed by combining a drug with a compressible carrier, followed by blending the mixture, compressing the mixture, and granulating the composition. Specifically required both in the claims and specification of the Klothen reference is the compaction step of the process. In the present invention, as claimed, a substantially dustless animal premix composition is provided without the necessity of the compaction step of the Klothen reference.

Thus, the Klothen reference attempts to overcome the problem of dust by compaction of the premix which is an unnecessary and undesirable step in practicing the present invention, and would result in a structural composition of the product which is different than the present invention. The Klothen reference provides a compacted animal feed which may result in problems that are specifically addressed by the present invention, as shown in the following:

“Dust Particles that adhere to feed mills or other feed processing equipment or that may be carried away in dust collection system may contain significant quantities of the active ingredient. This may cause the feed mixtures to have a lower concentration of the medicament desired. Dust adherent to the feed processing equipment and dust collected in a dust collection that is recycled in subsequent batches may cause the feed mixtures produced in later batches to have a higher concentration of the active ingredient than desired, or may cause carry over of the drug to feed batches which are not intended to contain the drug. *Application, Page 2.*

Therefore, by utilizing the present invention, a particulate free of cross-contamination may be produced without the contaminating compaction step of the Klothen reference.

Further, the Klothen reference teaches away from the present invention. For example,

as stated in the summary of the invention of Klothen reference:

[O]ther attempts relate to the preparation of wet aggregates followed by granulation and subsequent drying of the granules The latter process is generally too costly for this type of application and also, because of the frequent use of water, causes stability problems with many drugs.

Id. at Col. 2, Ln 4-6, 11-14.

In the present invention, a “wet” process may be performed to arrive at a substantially dustless granular feed premix composition without stability problems. For example, referring to Claims 1, 57, 66 and 77, an organism producing an antibiotic is cultured in a fermentation medium to produce a fermentation broth which is then reduced to obtain fermentation solids comprising said antibiotic. Thus, the fermentation solid comprises the antibiotic, wherein in the Klothen reference, an antibiotic is merely added to animal feed and then compacted.

Additionally, nowhere in the Klothen reference is disclosed the step of adding an additional quantity of an antibiotic to a fermentation broth to increase the antibiotic activity of the fermentation broth, as claimed in the present application. By adding an additional amount of antibiotic, greater levels of an antibiotic may be achieved than through a fermentation process utilized alone. Additionally, even if achieving the desired level of antibiotic activity would not require the additional of additional antibiotic, it may still be preferable to add the additional antibiotic in order to save time and yet achieve the cost reduction of the fermentation process. For example, the fermentation process may show increased activity over the initial stages, but then result in slower fermentation as the levels of the antibiotic increase in the broth. Therefore by utilizing the present invention, a large

quantity of antibiotic may be generated in a short amount of time during the periods of greatest production, and then fortify the broth containing the antibiotic with additional amounts of antibiotic, which may be provided from other fermentation processes, *See Page 14, Line 25 to Page 17, Line 3*, to achieve the desired activity.

Moreover, the Examiner asserts that "we see the particles as meeting instant substantially dry and uniform size requirements," but does not show support for such an assertion. As stated above, to show a *prima facie* case of anticipation, each and every aspect must be shown.

Therefore, it is respectfully requested that the rejection be withdrawn.

35 U.S.C. § 103(a)

The Examiner rejected Claims 1-10, 57-75, 87, 99 and 100 under 35 U.S.C. § 103(a) as being unpatenable over Kemp, U.S. Pat. No. 5,908,634 in view of Klothen, U.S. Pat. No. 4,447,421. The Applicants respectfully disagree.

"Obviousness cannot be established by combing the teachings of the prior art ... absent some teaching, suggestion or incentive supporting the combination." *Manarch Knitting Mach. Corp. v. Sulzer Morat GmbH*, 129 F.3d 877, 45 USPQ 1d 1977, 1981-82 (Fed Cir. 1998). The Examiner first asserts Kemp "to provide non compacted granules of premix of non-compacted ingredient," and then asserts Klothen to cure the defects of the reference, such as a fermentation source. As articulated by the Federal Circuit, the question is not whether a combination could be used, as shown in the following excerpt.

It is insufficient to establish obviousness that the separate elements of the invention existed in the prior art, absent some teaching or suggestion, in the

prior art, to combine the elements The evidence that the combination was not viewed as technically feasible must be considered, for conventional wisdom that a combination should not be made is evidence of unobviousness. *Arkie Lures, inc. v. Gene Larew Tackle, Inc.*, 119 F.3d 953, 43 USPQ 2d 1294 (Fed. Cir. 1997).

As stated above, Klothen expressly teaches away from the present invention and the use of wet aggregates, "known disadvantages in old devices which would naturally discourage the search for new inventions may be taken into account in determining obviousness." *United States v. Adams*, 383 U.S. 39, 52, 148 USPQ 479, 484 (1966).

Furthermore, even assuming for the sake of argument that one having ordinary skill in the art would be motivated to make the modification proposed by the Examiner, such a modification would not result in the Applicant's invention. In the present case, the Examiner proposes the modification of a molasses by-product of Kemp with a compaction process of Klothen. Thus, there is no motivation as supplied by the references to a person of ordinary skill in the art to make such a combination. Moreover, the Examiner seems to indicate that no relevance is given to the process by which the components are achieved. However, in Claims 66, 77 and 87, process claims are submitted, which, as the Examiner is well aware, are entitled to being contemplated in the obviousness determination, as shown in the following excerpt:

[O]bviousness requires that one compare the claim's "subject matter as a whole" with the prior art to which said subject matter pertains." 35 U.S.C. Section 103. The inquiry is thus highly fact-specific by design. This is so "whether the invention be a process for making or a process of using, or some other process." *In re Ochiai*, 71 F.3d 1565, 37 USPQ 2d 1127, 1131 quoting *In re Kuehl*, 475 F.2d 658, 665, 177 USPQ 250, 255 (C.C.P.A. 1973).

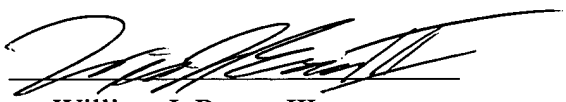
Thus, the present invention, as claimed, must be examined as a whole, and withdrawal of the rejection is respectfully requested.

CONCLUSION

In light of the forgoing, reconsideration and allowance of the claims is earnestly solicited.

Respectfully submitted,
Winstrom et al.

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By: 
William J. Breen, III
Reg. No. 45,313

SUITER & ASSOCIATES PC
14301 FNB Parkway, Suite 220
Omaha, NE 68154
(402) 496-0300 telephone
(402) 496-0333 facsimile

VERSION WITH MARKINGS TO SHOW CHANGES MADE

Please amend the claims as follows.

1. (Twice Amended) A substantially dustless animal feed premix composition in solid noncompacted granular form and having a high resistance to powdering, said composition comprising a physical admixture of granular fermentation solids comprising an antibiotic, said fermentation solids resulting from reduction of a fermentation broth including a fermentation medium in which an organism was cultured for producing the antibiotic, and further comprising at least one potency standardizer selected from the group consisting of an edible feed material and a mineral product.

57. (Amended) A particulate, substantially dustless noncompacted animal feed supplement comprising fermentation solids comprising an antibiotic product of a fermentation process, said fermentation solids resulting from reduction of a fermentation broth including a fermentation medium in which an organism was cultured for producing the antibiotic, said animal feed supplement prepared by blending fermentation solids with an edible feed material and a mineral product to produce a mixture thereof.

87. (Amended) A particulate, substantially dustless animal feed supplement comprising fermentation solids comprising an antibiotic product of a fermentation process, said animal feed supplement prepared by:
providing fermentation solids, said fermentation solids having [comprising a low] antibiotic activity;
adding an antibiotic to said fermentation solids;

drying said fermentation solids to produce a solid having a low moisture content; and
granulating said dry solid to produce granulated fermentation solids comprising granules
having a substantially uniform particle size.